

09/980172

JC10 Rec'd PCT/PTO 29 NOV 2001
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: Not yet assigned
Filing Date: Herewith
Applicant: Sandbach, et al.
Title: DATA PROCESSING APPARATUS WITH
REPLACEMENT KEYBOARD
Attorney Docket: 9637-000037

Box PCT
Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Applicant herewith submits this Preliminary Amendment to the application filed herewith, for consideration prior to the calculation of the filing fee, as follows:

IN THE SPECIFICATION

Please amend the title of the invention as filed to read:

DATA PROCESSING APPARATUS WITH REPLACEMENT KEYBOARD

Applicant includes herewith an Attachment for Specification Amendment showing a marked up version of the amendment to the title.

IN THE CLAIMS

Please amend Claims 3 - 5, 7 - 8, 10 - 12, and 16 - 18, in accordance with the

following rewritten claims in clean form. Applicant includes herewith an Attachment for Claim Amendments showing a marked up version of each amended claim.

3. (Amended) Data processing apparatus according to claim 1, wherein said processing means is configured to:

(a) perform a first measurement relating to the position of a mechanical interaction with said sensor to generate a first measurement value;

(b) perform a second measurement relating to the position of said mechanical interaction to generate second value; and

(c) generate said positional data only when said first value is within a predetermined amount of said second value.

4. (Amended) Data processing apparatus according to claim 1, wherein said sensor is an XY position sensor, and said positional data corresponds to the position within a continuous area defined by said sensor.

5. (Amended) Data processing apparatus according to claim 1, wherein said processing means is configured to measure a parameter of said sensor relating to the pressure applied to said sensor.

7. (Amended) Data processing apparatus according to claim 1, wherein said data processing apparatus comprises a hand-held computer.

8. (Amended) Data processing apparatus according to claim 1, wherein said processing means comprises two processing devices, such that:

one of said processing devices is configured to receive said signals from said input sensor and to generate said positional data and data of said second data type; and

the second of said processing devices is configured to process said positional data and data of said second data type to generate data corresponding to displayable characters.

10. (Amended) Data processing apparatus according to claim 8, wherein said first processing device forms part of a keyboard assembly.

11. (Amended) Data processing apparatus according to claim 8, wherein said first processing device is configured to generate a stream of data comprising positional data, and to send positional data to said second processing device only when an item of positional data differs from the immediately preceding item of sent data by more than a predetermined amount.

12. (Amended) Data processing apparatus according to claim 1, wherein said input sensor forms part of said data processing apparatus, and said input sensor comprises at least two layers of conductive fabric.

16. (Amended) A method of processing signals received from an input sensor according to claim 13, wherein said sensor is an XY position sensor, and said positional data corresponds to the position within a continuous area defined by said sensor.

17. (Amended) A method of processing signals received from an input sensor according to claim 13, wherein a parameter of said sensor relating to the pressure applied to said sensor is measured, and said positional data is generated by only when said parameter exceeds a predetermined amount.

18. (Amended) A method of processing signals received from an input sensor according to claim 13, wherein a stream of data comprising positional data is generated, and an item of positional data is processed to generate data representing a character only when said item of positional data differs from the immediately preceding item of data in said stream by more than a predetermined amount.

REMARKS

Claims 3 - 5, 7 - 8, 10 - 12, and 16 - 18 have been amended. Claims 1 - 2, 6, 9, and 13 - 15 remain unchanged. After acceptance of this Amendment, Claims 1 through 18 will remain pending in the current application. The purpose of this preliminary amendment is to clarify language and remove multiple dependent claims from the application to reduce filing costs. Consideration of the application as amended is requested.

Respectfully submitted,

Date: Nov 29, 2001

Harness, Dickey & Pierce, P.L.C.
P.O. Box 828
Bloomfield Hills, MI 48303
(248) 641-1600

By: Gregory Stobbs
Gregory A. Stobbs, Reg. No. 28764
Attorney for Applicant

ATTACHMENT FOR AMENDMENT TO THE SPECIFICATION

TITLE

The following is a marked up version of the amended title in which underlines indicates insertions and brackets indicate deletions.

DATA PROCESSING APPARATUS WITH REPLACEMENT KEYBOARD

ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

3. (Amended) Data processing apparatus according to claim 1 [or claim 2], wherein said processing means is configured to:

(a) perform a first measurement relating to the position of a mechanical interaction with said sensor to generate a first measurement value;

(b) perform a second measurement relating to the position of said mechanical interaction to generate second value; and

(c) generate said positional data only when said first value is within a predetermined amount of said second value.

4. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 3], wherein said sensor is an XY position sensor, and said positional data corresponds

to the position within a continuous area defined by said sensor.

5. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 4], wherein said processing means is configured to measure a parameter of said sensor relating to the pressure applied to said sensor.

7. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 6], wherein said data processing apparatus comprises a hand-held computer.

8. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 7], wherein said processing means comprises two processing devices, such that:

one of said processing devices is configured to receive said signals from said input sensor and to generate said positional data and data of said second data type; and

the second of said processing devices is configured to process said positional data and data of said second data type to generate data corresponding to displayable characters.

10. (Amended) Data processing apparatus according to [any of] claim 8 [or 9], wherein said first processing device forms part of a keyboard assembly.

11. (Amended) Data processing apparatus according to [any of] claim[s] 8 [to 10], wherein said first processing device is configured to generate a stream of data

comprising positional data, and to send positional data to said second processing device only when an item of positional data differs from the immediately preceding item of sent data by more than a predetermined amount.

12. (Amended) Data processing apparatus according to [any of] claim[s] 1 [to 11], wherein said input sensor forms part of said data processing apparatus, and said input sensor comprises at least two layers of conductive fabric.

16. (Amended) A method of processing signals received from an input sensor according to claim [any of] claim[s] 13 [to 15], wherein said sensor is an XY position sensor, and said positional data corresponds to the position within a continuous area defined by said sensor.

17. (Amended) A method of processing signals received from an input sensor according to [any of] claim[s] 13 [to 16], wherein a parameter of said sensor relating to the pressure applied to said sensor is measured, and said positional data is generated by only when said parameter exceeds a predetermined amount.

18. (Amended) A method of processing signals received from an input sensor according to [any of] claim[s] 13 [to 7], wherein a stream of data comprising positional data is generated, and an item of positional data is processed to generate data representing a character only when said item of positional data differs from the

immediately preceding item of data in said stream by more than a predetermined amount.

Rec'd PCT/PTO 13 MAR 2002
09/980172
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/980,172
Filing Date: 29 November 2001
Applicant: Sandbach, et al.
Title: DATA PROCESSING APPARATUS WITH
REPLACEMENT KEYBOARD
Attorney Docket: 9637-000037

Box PCT
Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231
Attn: Examiner India Evans

SUPPLEMENTAL PRELIMINARY AMENDMENT

Madam:

Applicant herewith submits this Supplemental Preliminary Amendment to the application filed on 29 November 2001, for consideration prior to the calculation of the filing fee, as follows:

IN THE CLAIMS

Please amend Claim 15 in accordance with the following rewritten claim in clean form. Applicant includes herewith an Attachment for Claim Amendments showing a marked up version of each amended claim.

15. (Amended) A method of processing signals according to claim 13, wherein said method includes the steps of:

Sandbach
Preliminary Amendment
Page 2 of 4

- (a) performing a first measurement relating to the position of a mechanical interaction with said sensor to generate a first measurement value;
- (b) performing a second measurement relating to the position of said mechanical interaction to generate second value; and
- (c) generating said positional data only when said first value is within a predetermined amount of said second value.

09/980,172

Serial No. 09/980,172

Sandbach
Preliminary Amendment
Page 3 of 4

REMARKS

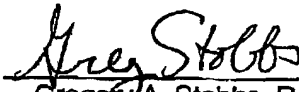
Pursuant to a phone conversation with Examiner Evans on this date, Applicant submits this Supplemental Preliminary Amendment to remove the multiple dependency regarding claim 15. Applicant thanks the Examiner for her consideration in this matter and respectfully requests that the application be allowed as amended.

Respectfully submitted,

Date: 13 March 2002

Harness, Dickey & Pierce, P.L.C.
P.O. Box 828
Bloomfield Hills, MI 48303
(248) 641-1600

By:



Gregory A. Stobbs, Reg. No. 28764
Attorney for Applicant

Serial No. 09/980,172

Sandbach
Preliminary Amendment
Page 4 of 4

ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

15. (Amended) A method of processing signals according to claim 13 [or claim 14], wherein said method includes the steps of:

- (a) performing a first measurement relating to the position of a mechanical interaction with said sensor to generate a first measurement value;
- (b) performing a second measurement relating to the position of said mechanical interaction to generate second value; and
- (c) generating said positional data only when said first value is within a predetermined amount of said second value.

Serial No. 09/980,172